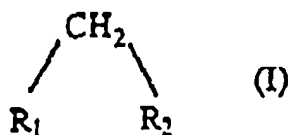


CLAIMS

1. Use, for dyeing keratin fibres, of at least one compound containing active methylene comprising a methylene group substituted with two groups with an electron-withdrawing or mesomeric effect chosen from:

1) the compounds of formula (I) below:



in which:

- 10 R_1 denotes a group $-\text{COR}$ or $-\text{COOR}$ with R denoting a hydrogen atom or an alkyl group,
 R_2 denotes the groups denoted by R_1 , a nitrile group, a substituted or unsubstituted aryl or alkylaryl group, or a substituted or unsubstituted heterocycle;

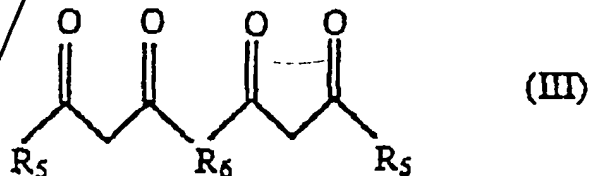
15 2) the compounds of formula (II) below:



in which:

- R_3 denotes the groups denoted by R_2
 R_4 denotes a substituted or unsubstituted alkyl group,
20 an acetyloxy group, a cycloalkyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aminoaryl group, a substituted or unsubstituted alkylaryl group, or a substituted or unsubstituted heterocycle;

25 3) the compounds of formula (III) below:

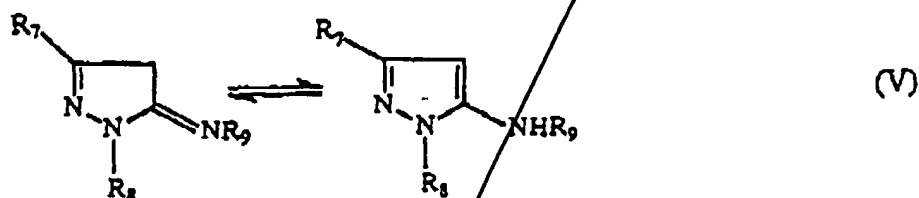
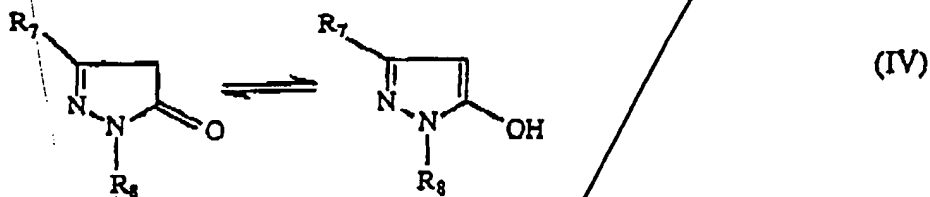


in which:

R_5 denotes the groups denoted by R_2

R_6 denotes a substituted or unsubstituted aryl or alkaryl group, a substituted or unsubstituted aminoaryl group or a substituted or unsubstituted heterocycle;

4) the pyrazole derivatives (i) of formulae (IV) and (V) below:



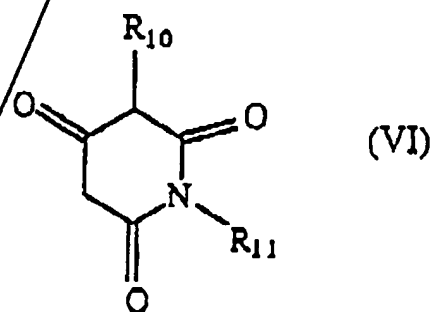
in which:

R_7 and R_8 , which may be identical or different, denote the groups denoted by R_4 ,

10 R_9 denotes a hydrogen atom or a substituted or unsubstituted alkyl group;

and (ii) formed by two pyrazole rings of formula (IV) or (V) linked by R_7 or R_8 ;

5) the barbituric acid derivatives (i) of
15 formula (VI) below:

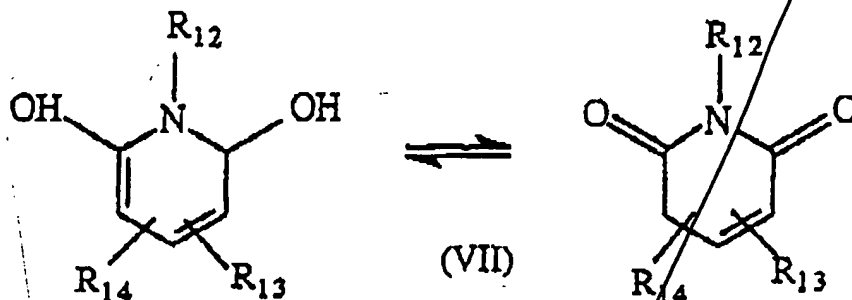


in which:

R_{10} and R_{11} , which may be identical or different, denote a substituted or unsubstituted alkyl group, an alkenyl group, a cycloalkyl group, an alkylaryl group or a substituted or unsubstituted aryl group, and (ii)

20 formed by two rings of formula (VI) linked by R_{10} or R_{11} ;

6) the pyridine derivatives of formula (VII):



in which:

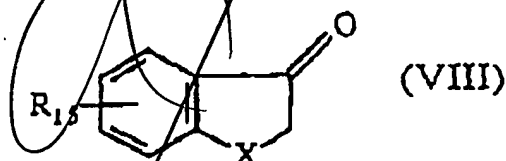
R_{12} denotes a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group;

5 R_{13} denotes a hydrogen atom, a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group;

R_{14} denotes a hydrogen atom, a nitrile group, a substituted or unsubstituted alkyl group, or a group

10 COOR , R denoting a hydrogen atom or a substituted or unsubstituted alkyl group;

7) the derivatives of formula (VIII) below:

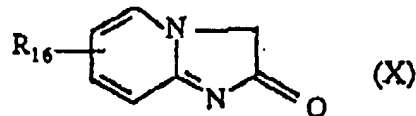
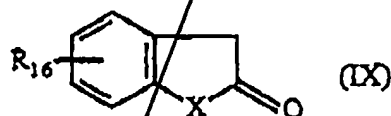


in which:

15 X denotes an oxygen, sulphur or nitrogen atom or a group NR' , R' denoting an alkyl group,

R_{15} denotes a hydrogen, chlorine or bromine atom or a hydroxyl, nitro, alkyl, alkoxy, carboxamide, sulphonamide or nitrile group;

20 8) the derivatives of formulae (IX) and (X) below:

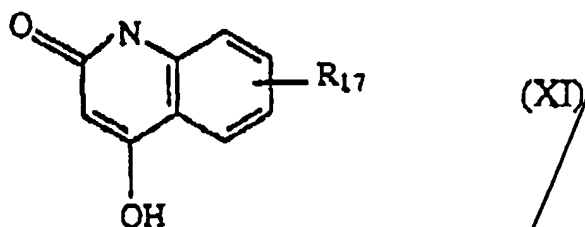


in which:

25 X denotes an oxygen, sulphur or nitrogen atom or a group NR' , R' denoting an alkyl group,

R_{16} denotes the atoms and groups denoted by R_{15} ;

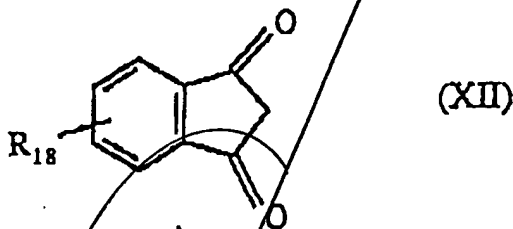
9) the derivatives of formula (XI) below:



in which:

R₁₇ denotes a hydrogen atom, a hydroxyl group, a substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl or alkylaryl group;

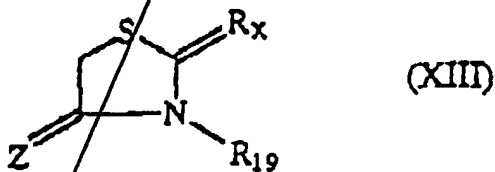
10) the indanedione derivatives of formula (XII) below:



10 in which:

R₁₈ denotes a hydrogen, chlorine or bromine atom or a nitro, alkyl, alkoxy, carboxamide, sulphonamide or nitrile group;

11) the derivatives of formula (XIII) below:



15

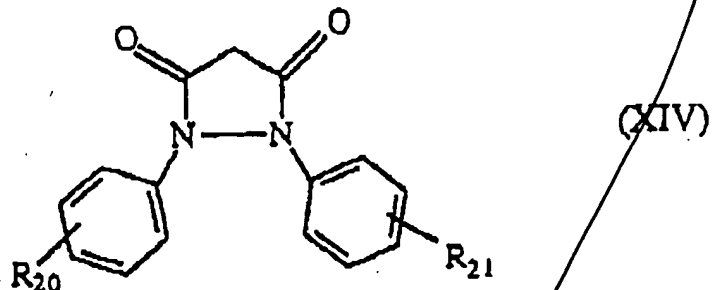
in which:

Z denotes O or NR with R = H or alkyl

R_x denotes a sulphur atom or NR, R denoting a hydrogen atom or an alkyl group;

20 R₁₉ denotes a hydrogen atom or an alkyl, alkoxy, nitro or nitrile group;

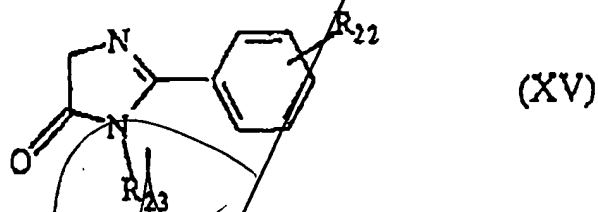
12) the dioxypyrazole derivatives of formula (XIV) below:



in which:

5 R_{20} and R_{21} , which may be identical or different, denote a hydrogen atom or an alkyl, alkoxy, nitro or nitrile group;

13) the 5-oxoimidazole derivatives of formula (XV) below:

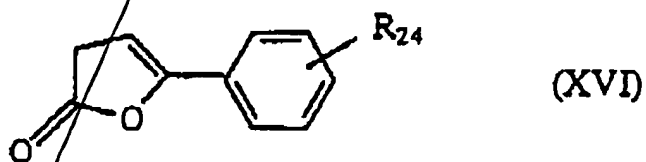


in which:

10 R_{22} denotes a hydrogen atom or an alkyl group

R_{23} denotes a hydrogen atom or an alkyl, alkoxy, nitro or nitrile group;

14) the dehydrobutyrolactone derivatives of formula (XVI) below:

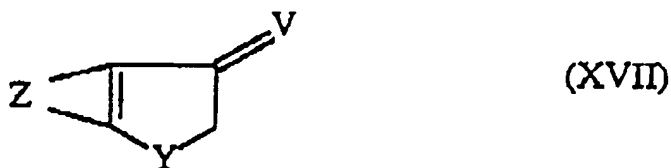


15

in which:

R_{24} denotes a hydrogen atom or an alkyl, alkoxy, nitro or nitrile group;

15) the compounds of formula (XVII) below:



20

in which:

Z forms an aromatic ring

V denotes an oxygen atom or a group

in which A or E denotes a substituent having a Hammett constant of between 0.4 and 2.0 or substituents for which the sum of the Hammett constants is between 0.4 and 2.0

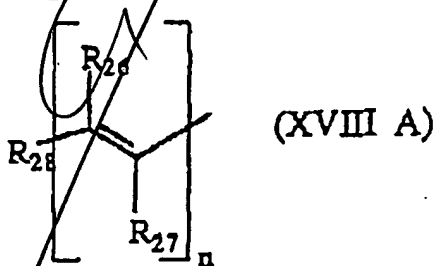
Y denotes Co, O, S or NR₁ when V is other than an oxygen atom, or denotes CS, C = NR₂, SO or SO₂ with R₁ or R₂ denoting a hydrogen atom or an alkyl radical;

and from the cosmetically acceptable salts of the compounds defined above; and of at least one aldehyde corresponding to formula (XVIII) below:



in which:

R₂₅ denotes a group of formula (XVIII A) below:



in which

R₂₆ and R₂₇, which may be identical or different, denote a hydrogen atom or an alkyl, mono- or polyhydroxyalkyl, alkylhydroxyalkyl, alkoxy, -CF₃ or -OCF₃ group,

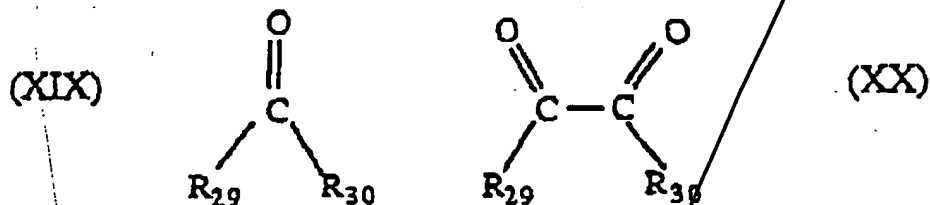
R₂₆ and R₂₇ can also form, together with the atoms to which they are attached, a 5- or 6-membered heterocyclic or aryl ring, the said rings possibly being substituted or unsubstituted;

n denotes an integer from 0 to 3,

R₂₈ denotes the substituents denoted by R₂₆, a substituted or unsubstituted aryl or alkylaryl group or a substituted or unsubstituted 5- or 6-membered heterocyclic group,

or with the cosmetically acceptable salts of these compounds;

a ketone corresponding to formula (XIX) or (XX)
below:

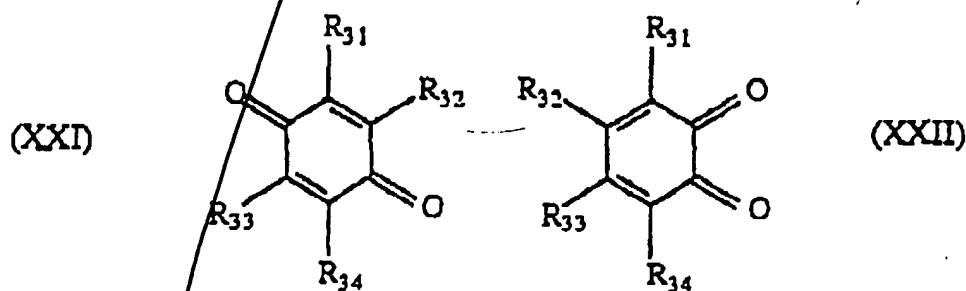


in which:

- 5 R_{29} denotes the substituents denoted by R_{25}
 R_{30} denotes an alkyl, mono- or polyhydroxyalkyl, or
 alkylhydroxyalkyl group or a substituted or
 unsubstituted aryl, alkylaryl or 5- or 6-membered
 heterocyclic group,
 10 R_{29} and R_{30} can also form, together with the atoms to
 which they are attached, a 5- or 6-membered aryl ring
 or a heterocyclic ring comprising hetero atoms such as
 N or S, it being possible for the said ring itself to
 be attached to a 5- or 6-membered aryl ring or to a
 15 heterocycle comprising hetero atoms such as N or S, the
 said rings possibly being substituted or unsubstituted,
 or with the cosmetically acceptable salts of these
 compounds,

a quinone and a diiminoisoindoline or
 20 3-aminoisoindolone derivative, making it possible to
 obtain, by reaction without an oxidizing agent, a
 coloration of the said keratin fibres.

2. Use according to Claim 1, characterized in that
 the quinone corresponds to formulae (XXI) and (XXII)
 25 below:



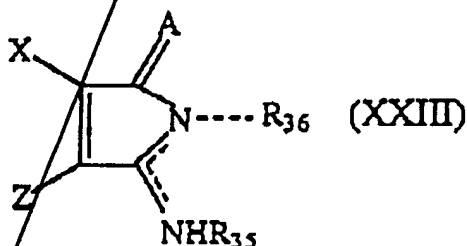
in which:

R_{31} denotes a hydrogen or halogen atom or a sulphonic or alkoxy group,

R_{32} , R_{33} and R_{34} , which may be identical or different, denote a hydrogen or halogen atom, a hydroxyl, alkyl, 5 mono- or polyhydroxyalkyl, alkylhydroxyalkyl, alkylsulphonyl, carboxyalkyl, aminoalkyl, alkylaminoalkyl, (dihydroxy)alkylaminoalkyl or alkyl-NR'R" group (with R' and R" denoting alkyl or possibly forming, together with the nitrogen atom to which they are attached, an aryl ring or a 5- or 6-membered heterocycle), an aryl group or an amino group which can be substituted with an alkyl or a hydroxyalkyl,

R_{31} and R_{32} , R_{31} and R_{33} or R_{33} and R_{34} can form, together with the atoms to which they are attached, a 15 substituted or unsubstituted aryl ring or 5- or 6-membered heterocycle; or to the cosmetically acceptable salts of these compounds.

3. Use according to either of Claims 1 and 2, 20 characterized in that the diiminoisoindoline or 3-aminoisoindolone derivatives correspond to formula (XXIII) below:



in which:

25 R_{35} and R_{36} , which may be identical or different, denote a hydrogen atom, an alkyl, mono- or polyhydroxyalkyl, alkylhydroxyalkyl, aminoalkyl, alkylaminoalkyl or (dihydroxy)alkylaminoalkyl group or an alkyl-NR'R" group, with R' and R" denoting alkyl or possibly 30 forming, together with the nitrogen atom to which they are attached, an aryl ring or a 5- or 6-membered heterocycle,

A denotes an oxygen atom or NH,

X and Z together form a substituted or unsubstituted aryl ring or a 5- or 6-membered heterocycle; or to the cosmetically acceptable salts of these compounds.

5 4. Composition for dyeing keratin fibres, in particular human keratin fibres such as the hair, characterized in that it comprises at least one compound containing active methylene chosen from the compounds defined according to Claim 1, and at least
10 one compound chosen from an aldehyde, a ketone, a quinone and a diiminoisoindoline or 3-aminoisoindolone derivative, the said compound being chosen from the compounds defined according to Claim 1, in a medium which is suitable for dyeing, making it possible to
15 obtain, without an oxidizing agent, a coloration of the said keratin fibres.

5. Dye composition according to Claim 4, characterized in that the quinone and the diiminoisoindoline or 3-aminoisoindolone derivative are
20 chosen from the compounds defined according to Claims 2 and 3.

6. Dye composition according to either of Claims 4 and 5, characterized in that it has a pH of between 2 and 11.

25 7. Composition according to Claim 4, characterized in that the compound containing active methylene is present in a concentration ranging from 0.1% to 10%, and preferably from 0.5% to 5%, by weight relative to the total weight of the composition.

30 8. Composition according to either of Claims 4 and 5, characterized in that the compound chosen from an aldehyde, a ketone, a quinone and a diiminoisoindoline or 3-aminoisoindolone derivative is present in a concentration ranging from 0.1% to 10%, and preferably
35 from 0.5% to 5%, by weight relative to the total weight of the composition.

9. Composition according to any one of Claims 4 to 8, characterized in that the medium which is suitable for dyeing is an aqueous medium consisting of water

and/or organic solvents chosen from alcohols, glycols and glycol ethers, in proportions of between 0.5% and 20% by weight relative to the total weight of the composition.

5 10. Process for dyeing keratin fibres, in particular human keratin fibres such as the hair, characterized in that it consists in applying to the said fibres a component (A) consisting of a composition containing, in a medium which is suitable for dyeing,
10 at least one compound containing active methylene as defined in Claim 1 and at least one component (B) consisting of a composition containing, in a medium which is suitable for dyeing, at least one compound chosen from an aldehyde, a ketone, a quinone and a
15 diiminoisoindoline or 3-aminoisoindolone derivative as defined in Claim 1, so as to allow the development of a coloration with the said keratin fibres.

11. Process according to Claim 10, characterized in that the quinone and the diiminoisoindoline or
20 3-aminoisoindolone derivative are chosen from the compounds according to either of Claims 2 and 3.

12. Process according to either of Claims 9 and 10, characterized in that it consists in mixing components (A) and (B) just before use, in immediately applying
25 the resulting composition to the keratin fibres and in leaving the composition to act on the fibres for 1 to 60 minutes and preferably for 1 to 30 minutes; the keratin fibres then being rinsed, washed with shampoo, rinsed again and then dried.

30 13. Process according to any one of Claims 9 to 11, characterized in that it consists in applying component (A) to the keratin fibres, followed or preceded by application of component (B) to the said fibres, in leaving each component to act for 1 to 60 minutes and
35 preferably for 1 to 30 minutes, and in optionally rinsing with water between each application; the keratin fibres then being rinsed, washed with shampoo, rinsed again and then dried.

14. Agent for dyeing keratin fibres, and in particular human keratin fibres such as the hair, characterized in that it separately comprises components (A) and (B) as defined in Claims 10 to 13;
5 components (A) and (B) being intended to be either mixed immediately before use, or applied successively to the fibres to be treated.

15. Multi-compartment device or "dyeing kit", characterized in that it comprises at least two
10 compartments, one of which contains component (A) as defined in Claim 10, and the second of which contains component (B) as defined in Claim 10 or 11.

16. Device according to Claim 15, characterized in that component (A) and/or component (B) is/are in the
15 form of an anhydrous composition and in that it comprises a third compartment containing a cosmetically acceptable aqueous medium which is suitable for dyeing and which is intended to be mixed, before use, into one or both of the first compartments containing each
20 component (A) or (B).

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